Commonwealth of Kentucky

Environmental and Public Protection Cabinet Department for Environmental Protection

Division for Air Quality 803 Schenkel Lane Frankfort, Kentucky 40601 (502) 573-3382

AIR QUALITY PERMIT Issued under 401 KAR 52:040

Permittee Name: SWECO, Division of M-I LLC

8029 Dixie Highway

Mailing Address: P.O. Box 1509

Florence, KY 41022-1509

Source Name: SWECO, Division of M-I LLC

Mailing Address: P.O. Box 1509

Florence, KY 41022-1509

Source Location: 8029 Dixie Highway

Florence, KY 41022-1509

Permit Number: S-04-047(Revision 1)

Source A. I. #: 254

Activity #: APE20060001

Review Type: Minor Modifiation, Minor Source

Source ID #: 21-015-00102

Regional Office: Florence Regional Office

8020 Veterans Memorial Dr, Suite 110

Florence, KY 41042

County: Boone

Application July 13, 2004

Complete Date:

Issuance Date: July 23, 2004 Revision Date: May 25, 2006 Expiration Date: July 23, 2014

> John S. Lyons, Director Division for Air Quality

Permit Number: S-04-047 (Revision 1) **Page:** 1 of 10

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction and operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify an affected facility without first having submitted a complete application and received a permit for the planned activity from the Division, except as provided in this permit or in 401 KAR 52:040, State-origin permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining other permits, licenses, or approvals that may be required by the Cabinet or other federal, state, or local agencies.

Permit Number: <u>S-04-047</u>(Revision 1) **Page:** <u>2</u> **of** <u>10</u>

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

01 (01) Finish Paint Spray Booth

Size: 22 ft x 12 ft

Rated Capacity: 3 gal/hr Manufacture: DeVilbiss

Construction Commenced date: September 10, 1990

Control Equipment: Particulate Filter

02 (02) Primer Paint Spray Booth

Size: 22 ft x 12 ft

Rated Capacity: 3 gal/hr Manufacture: DeVilbiss

Construction Commenced date: October 31, 1991

Control Equipment: Particulate Filter

04 (04) Oil Field Equipment Paint Spray Booth

Capacity: 0.75 gal/hr

Construction Commenced Date: December 2002

Control Equipment: Particulate Filter

APPLICABLE REGULATIONS:

Regulation 401 KAR 59:010, New process operations applicable to each affected facility associated with a process operation commenced after July 2, 1975, limits particulate emissions.

Regulation 401 KAR 63:020, Potentially Hazardous Matter or Toxic Substances, applicable to the potentially hazardous matter and toxic substance emissions from affected facilities.

1. **Operating Limitations:**

- 1. The usage rate of materials used in affected facilities shall not exceed the emission limitations as described in Section B(2) below.
- 2. The filter system shall be operated and maintained in accordance with the manufacturer's specification and filter(s) shall be in place at all times when the affected facility is in operation.

2. Emission Limitations:

1. Pursuant to Regulation 401 KAR 59:010, Section 3(2), emissions of particulate matter shall not exceed 2.34 lbs/hr per booth.

Compliance Demonstration Method:

The source is assumed to be in compliance if the conditions in Section B(1)(2) Operating Limitations, B(4)(1) Monitoring Requirements and B(5)(6) Recordkeeping Requirements are met.

Permit Number: S-04-047 (Revision 1) **Page:** 3 **of** 10

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Pursuant to Regulation 401 KAR 59:010, Section 2(1)(a), visible emissions shall not equal or exceed 20% opacity.

Compliance Demonstration Method:

The source is assumed to be in compliance if the condition in Section B(4)(2) Monitoring Requirements is met.

3. To preclude the applicability of 401 KAR 59:225, the source wide VOC emission shall be less than 18 tons per rolling 12 month total.

Compliance Demonstration Method:

Monthly VOC emission (lbs) = ∑[Monthly usage of each coating, solvent thinner, or any other VOC containing material in gallons] x [VOC Emission Factor in pounds per gallons (as applied) for each coating, solvent thinner, or any other VOC containing material used].

4. Pursuant to Regulation 401 KAR 63:020, Section 3, the permittee shall not allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants.

Compliance Demonstration Method:

The source is in compliance with 401 KAR 63:020. This compliance determination is based on the emission rates of toxics given in the application submitted by the source. If the source alters process rates, material formulations, or any other factor that would result in an increase of toxics emissions or the addition of toxics emissions not previously evaluated by the Division, the source shall submit the appropriate application forms pursuant to 401 KAR 52:040, Section 3, along with modeling to show that the facility will remain in compliance with 401 KAR 63:020.

3. <u>Testing Requirements:</u>

Testing shall be conducted at such times as may be required by the Cabinet in accordance with Regulation 401 KAR 50:045 Section 4 to demonstrate continued compliance.

4. **Monitoring Requirements:**

- 1. The permittee shall inspect filter(s) on a daily basis. Filters shall be replaced when determined to be ineffective (through visual inspection).
- 2. The permittee shall perform a qualitative visual observation of the opacity emissions from the stack on a weekly basis. If visible emissions from the stack are seen (not including condensed water vapor), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.

5. Record Keeping Requirements:

- 1. Monthly purchase and usage (in gal) of coating, clean-up solvents, and thinners, as well as any other materials used shall be recorded.
- 2. The VOC/HAP content (in lb/gal) of each coating, thinners, cleaning solvents and any other materials used during each calendar month shall be recorded.

Permit Number: S-04-047 (Revision 1) **Page:** $\underline{4}$ **of** $\underline{10}$

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- 3. At the end of each month, VOC/HAP emissions shall be calculated and recorded.
- 4. A rolling 12 months summary for each month showing total tons of VOC/HAP emitted shall be recorded. The total tons of VOC/HAP emitted shall include insignificant activities.
- 5. All records, including MSDS for each material used shall be retained at the source for a period of five years.
- 6. A log of filters' daily observation shall be maintained.
- 7. A log of opacity's weekly visual observation shall be maintained.

6. Reporting Requirements:

- 1. The VOC/HAP emissions calculation for each month in the semiannual period shall be reported.
- 2. The total VOC/HAP emissions for each 12-month period ending in the semiannual period shall be reported.

Permit Number: <u>S-04-047</u>(Revision 1) **Page:** <u>5</u> **of** <u>10</u>

SECTION C - GENERAL CONDITIONS

A. Administrative Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:040, Section 3(1)(b) and is grounds for enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit.

- 2. This permit shall remain in effect for a fixed term of ten (10) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division. [401 KAR 52:040, Section 15]
- 3. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Material incorporated by reference by 401 KAR 52:040, Section 1a, 11].
- 4. Pursuant to materials incorporated by reference by 401 KAR 52:040, this permit may be revised, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance shall not stay any permit condition [Material incorporated by reference by 401 KAR 52:040, Section 1a, 4,5].
- 5. This permit does not convey property rights or exclusive privileges [Material incorporated by reference by 401 KAR 52:040, Section 1a, 8].
- 6. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:040 Section 11(3)].
- 7. This permit shall be subject to suspension at any time the permittee fails to pay all fees within 90 days after notification as specified in 401 KAR 50:038, Air emissions fee. The permittee shall submit an annual emissions certification pursuant to 401 KAR 52:040, Section 20.
- 8. All previously issued permit to this source at this location are hereby null and void.

B. Recordkeeping Requirements

1. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of at least five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [401 KAR 52:040 Section 3(1)(f)].

Permit Number: <u>S-04-047</u>(Revision 1) **Page:** <u>6</u> **of** <u>10</u>

SECTION C - GENERAL CONDITIONS (CONTINUED)

2. The permittee shall perform compliance certification and recordkeeping sufficient to assure compliance with the terms and conditions of the permit. Documents, including reports, shall be certified by a responsible official pursuant to 401 KAR 52:040, Section 21.

C. Reporting Requirements

- 1. a. In accordance with the provisions of 401 KAR 50:055, Section 1 the permittee shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - i. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - ii. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request.
 - b. The permittee shall promptly report deviations from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Reporting Requirement condition 1 a) above), the probable cause of the deviation, and corrective or preventive measures taken; to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report [Material incorporated by reference by 401 KAR 52:040, Section 5, 3].
- 2. The permittee shall furnish information requested by the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the permit [Material incorporated by reference by 401 KAR 52:040, Section 1a, 6].
- 3. Summary reports of monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation.

The summary reports are due January 30th and July 30th of each year. All deviations from permit requirements shall be clearly identified in the reports. All reports shall be certified by a responsible official pursuant to 401 KAR 52:040, Section 21.

D. <u>Inspections</u>

1. In accordance with the requirements of 401 KAR 52:040, Section 3(1)(f) the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:

Permit Number: <u>S-04-047</u>(Revision 1) **Page:** <u>7</u> **of** <u>10</u>

SECTION C - GENERAL CONDITIONS (CONTINUED)

a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;

- b. To access and copy any records required by the permit:
- c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
- d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

E. Emergencies/Enforcement Provisions

- 1. The permittee shall not use as defense in an enforcement action, the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Material incorporated by reference by 401 KAR 52:040, Section 1a, 3].
- 2. An emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency and included a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
- 3. Emergency provisions listed in General Condition E.2 are in addition to any emergency or upset provision contained in an applicable requirement [401 KAR 52:040, Section 22(1)].
- 4. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 52:040, Section 22(2)].

F. Compliance

at any

1. Periodic testing or instrumental or non-instrumental monitoring, which may consist of record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstration of continuing compliance with the conditions of this permit. For the purpose of demonstration of continuing compliance, the following guidelines shall be followed:

Pursuant to 401 KAR 50:055, General compliance requirements, Section 2(5), all air pollution control equipment and all pollution control measures proposed by the application in response to which this permit is issued shall be in place, properly maintained, and in operation

Permit Number: <u>S-04-047</u>(Revision 1) **Page:** <u>8</u> **of** <u>10</u>

SECTION C - GENERAL CONDITIONS (CONTINUED)

time an affected facility for which the equipment and measures are designed is operated, except as provided by State Regulation 401 KAR 50:055, Section 1.

- 2. Pursuant to 401 KAR 52:040, Section 19, the permittee shall certify compliance with the terms and conditions contained in this permit by January 30th of each year, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Regional Office listed on the front of this permit in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period, and
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
 - f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality Division for Air Quality

Florence Regional Office

8020 Ewing Boulevard, Suite 110

Florence, KY 41042

Central Files

803 Schenkel Lane
Frankfort, KY 40601

- 3. Permit Shield A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with all:
 - (a) Applicable requirements that are included and specifically identified in this permit; or
 - (b) Non-applicable requirements expressly identified in this permit [401 KAR 52:040, Section 11].

G. New Construction Requirements:

None

Permit Number: <u>S-04-047</u>(Revision 1) **Page:** <u>9</u> **of** <u>10</u>

SECTION D - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to Regulation 401 KAR 50:035, Section 5(4). While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

	<u>Description</u>	Generally Applicable Regulation
1.	Welding (Manual and Robotics)	401 KAR 59:010 and 401 KAR 63:010
2.	Laser Cutting (2)	Regulation 401 KAR 59:010
3.	Media Blast	Regulation 401 KAR 59:010
4.	Grinding Room	Regulation 401 KAR 59:010
5.	General Grinding/Polishing	Regulation 401 KAR 59:010
6.	Screen Curing	Regulation 401 KAR 63:010
7.	Electric Cure Oven	NA
8.	Spot Welding	Regulation 401 KAR 59:010
9.	TIG Welding	Regulation 401 KAR 59:010
10.	Metal Cutting	Regulation 401 KAR 59:010
11.	Roll Forming	Regulation 401 KAR 59:010
12.	Shear/Press Break	Regulation 401 KAR 59:010
13.	Thermal Machining	NA
14.	Woodworking Shop	Regulation 401 KAR 59:010
15.	Paint Gun Cleaners (3 total) 180 gal/yr (total for all 3)	NA
16.	Heat Press	NA
17.	Test Lab Screens	NA
18.	Finish Paint Spray Booth Air Make-Up Unit	NA

Permit Number: <u>S-04-047</u>(Revision 1) **Page:** <u>10</u> **of** <u>10</u>

SECTION D - INSIGNIFICANT ACTIVITIES (CONTINUED)

19. Primer Paint Spray Booth NA Air Make-Up Unit 20. Oil Filter Paint Booth NA Air Make-Up Unit 21. Fabricating Department NA Air Make-Up Unit 22. Screen Department NA Air Make-Up Unit 23. Unit Heaters NA (2 @ 0.30 MMBtu/hr) 24. Unit Heaters NA (7 @ 0.15 MMBtu/hr) 25. Industrial Paint Thinner Recycling 401 KAR 63:010 (Finish and Primer Paint Spray Booth) 26. Industrial Paint Thinner Recycling 401 KAR 63:010 (Oilfield Paint Spray Booth)